

REMARKS

A CRF and paper version of the "Sequence Listing" are provided herewith. Applicants hereby state that the contents of the CRF and the paper version of the CRF are identical. The sequences are plainly present in the original Specification. No new matter has been added.

The present CFR CD was prepared and validated by PatentIn version 3.1.1.6.

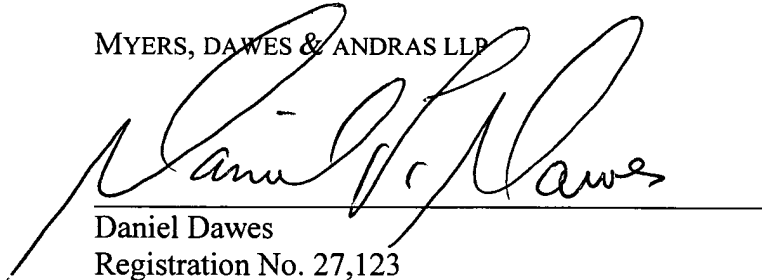
The specification has also been amended to insert "sequence ID NO:" indicators no other changes have been made, no new matter has been added.

Applicant respectfully submits that the case is now in condition for allowance and requests an early notification of the same. Questions, suggestions, and comments from the Examiner are welcomed. If the Examiner believes that a telephone conference would help further the prosecution of the case, the Examiner is requested to contact the undersigned attorney at the listed telephone number.

November 4, 2002

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on November 4, 2002

(Date of Deposit)

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Date of Signature 11-4-02

Following is the marked-up version of the amended specification paragraph.

Fig. 7 is a graph of phosphorylation as a function of time showing the separation of three different specific kinase reporter substrates from a sample of the contents of a *Xenopus laevis* oocyte **46'** that had been previously microinjected to contain $\sim 1 \mu\text{M}$ Fl-sPKC, $\sim 330 \text{ nM}$ Fl-sPKA, and $\sim 10 \text{ nM}$ Fl-scdc2K. Fl-sPKA, a specific reporter for protein kinase A (PKA) activity has the sequence FL-Lys-Arg-Arg-Glu-Ile-Leu-Ser-Arg-Arg-Pro-Ser-Tyr-Arg (sequence ID NO:1), and was derived from the CREB protein. Fl-scdc2K, a specific reporter for cdc2 kinase (originally identified genetically as cell division cycle mutant 2) has the sequence Fl-Gly-Gly-Gly-Arg-Ser-Pro-Gly-Arg-Arg-Arg-Arg-Lys (sequence ID NO:2), and comprises a consensus phosphorylation site derived from several proteins. The underlined serine residues are the sites of phosphorylation. The peptides were synthesized and labeled with fluorescein as described for Fl-sPKC, except that Fl-scdc2K was labeled with the mixed 5- and 6-isomers of carboxyfluorescein succinimidyl ester (100-200 mg/ml, Molecular Probes, Eugene OR); thus, Fl-scdc2K consisted of two isomeric forms. A peak **162** and a peak **172** were identified by their migration times as observed when injected into oocytes **46'** singly (not shown). The first doublet, peaks **162** and **164**, corresponds to two isomers of either phosphorylated or nonphosphorylated Fl-scdc2K. The second doublet, peaks **166** and **168**, corresponds to two isomers of the other form of Fl-scdc2K. One peak **170** represents nonphosphorylated Fl-sPKC, and one peak **172** represents nonphosphorylated Fl-sPKA.